

REMARKS

Applicant respectfully requests reconsideration of the application.

Claims 11-14, 16, 20-22 and 63-68 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claims 63-68 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,379,345 to Greenberg.

Priority Claim

The Office objected to the priority claim. The priority claim was originally specified in the application papers, including on the transmittal form of the patent application, and in a separate paper entitled Request for Priority. Nevertheless, Applicant has amended the priority claim to make it consistent with the priority claims in parent applications 09/186,962, filed November, 5, 1998 (pending), and application 08/649,419, filed May 16, 1996 (now Patent 5,862,260).

Written Description of Claims 11-12

Applicant identified parts of the specification that support claim 11 on page 6 of the request for interference under 37 C.F.R. 1.607 filed concurrently with the application.

In addition, the specification describes the use of key data in numerous places, such as page 23, line 16, page 30, lines 15-19, page 39, line 21, page 46, line 3. The key data causes the representation of an embedded code word to vary across the signal in which it is embedded according to the variations derived from the key data, which may comprise random or pseudorandom data used to modulate the code word, or a seed number used to generate pseudorandom data that modulates the code word, for example. In addition, as noted in the request for interference at page 6, the specification describes how the key can vary over blocks of data at page 61. The universal codes referred to on page 61 of the specification relate back to other portions of the specification that define these codes as the key data used to embed and extract the code word or "N-bit identification word."

Written Description of Claims 13-14

The Office contends that “no discussion on how to encode a watermark using a map derived from a mapping key and processing state information can be found.” Pages 6 and 7 of the request for interference identify portions of the specification that describe how key data is used to identify how and where to embed an “N-bit identification word” in a signal. The random or pseudorandom key data as described above in connection with claims 11-12 maps the code word to locations within the signal. First, the code word is modulated with particular bits of the key data. The key data, in turn, corresponds to (e.g., is “mapped” to) particular locations in the signal in which the code word is to be embedded. Thus, the key data provides a map indicating how and where to encode the code word in the signal. The specification at page 61, for example, describes how the key data varies with location in the signal, and also with the processing state: the key data (e.g., universal codes) varies according to which block of the signal is being processed, and instruction information provided from the previous block (e.g., the processing state information).

Written Description of Claims 20-22

The Office contends that no discussion on how to encode a watermark signal using pseudo-random spread spectrum techniques could be found. However, the request for interference at pages 8-9 identifies portions of the specification (e.g., page 116) that describe a pseudo-random spread spectrum technique for embedded data in audio signals transmitted in a cellular telephone network. This section of the specification, together with the other portions of the specification that describe how to embed data by modulating a pseudo-random carrier signal with a code word, provide support for these claims.

Written Description of Claims 16 and 63-68

The Office has not specifically described how the written description rejection applies to claims 16 and 63-68, if at all. However, assuming that the Office intended to apply similar rejections as those applied above to claims 11-14 and 20-22, Applicant submits that these claims are also well supported in view of:

1. the information provided in the request for interference filed with the application (for claim 16) and the supplemental chart filed on December 26, 2002 (for claims 63-68); and

2. the information provided above in response to the written description rejection.

As demonstrated above, the specification describes how to generate pseudo-random key data (e.g., noise generator seeded with a known key number to generate pseudorandom key data at page 30, line 16), it describes how this key data is used to embed a code word in various embodiments (key data is sometimes described as a universal code; see, for example, page 39, line 21), it describes how to vary the embedding over a signal according to location and processing state (e.g., as described in connection with the dynamic codes at page 61), and it describes how the key data, in some embodiments, corresponds to locations or blocks of a signal, thereby providing a mapping of the embedded code word to locations within the signal in which it is embedded.

Section 102 Rejection of Claims 63-68

The Office contends that Greenberg anticipates claims 63-68 but has failed to establish that Greenberg teaches encoding using "characteristics of the digital signal" as claimed in claim 63 and claim 66.

The undersigned attorney for Applicant, Joel Meyer, respectfully requests an interview with the Examiner to clarify issues that remain unclear in the action. Mr. Meyer can be reached at (503) 495-4644.


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Respectfully submitted,

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